

**REMARKS**

The Examiner is thanked for the due consideration given the application. The Specification has been amended to improve the headings.

Claims 1-20 are pending in the application. The amendments to claim 1 find support in paragraph 0038 of the specification.

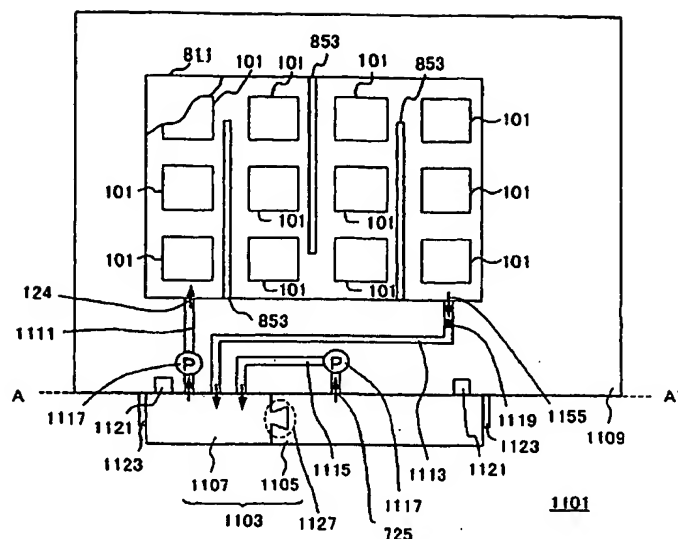
No new matter is believed to be added to the application by this amendment.

**Rejection Over HIROHISA ET AL.**

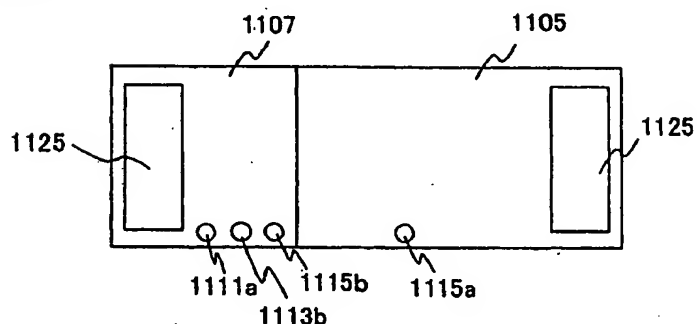
Claims 1-4, 6, 7 and 12-18 have been rejected under 35 USC §102(e) as being anticipated by HIROHISA et al. (JP 2004-265787). This rejection is respectfully traversed.

The present invention pertains to a removably mountable fuel cartridge for a fuel cell that is illustrated, by way of example, in Figures 1 and 2 of the application, which are reproduced below.

**Fig. 1**



**Fig. 2**

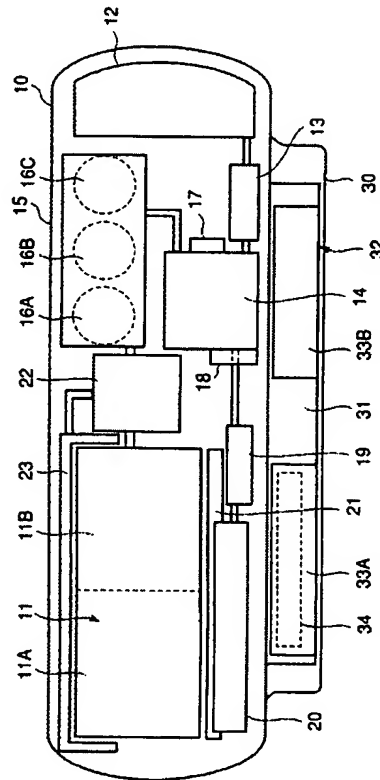


Figures 1 and 2 of the application show a removably mountable fuel cartridge 1103 that includes a high-concentration fuel tank 1105 and a low concentration fuel tank (which can also be a mixing tank, claim 4) 1107. Fuel that has circulated through cell structures 101 is returned to low concentration fuel tank 1107, to be mixed with high concentration fuel and sent back to the cells.

Claim 1 of the present invention recites "said first liquid fuel being a high-concentration liquid fuel; a second

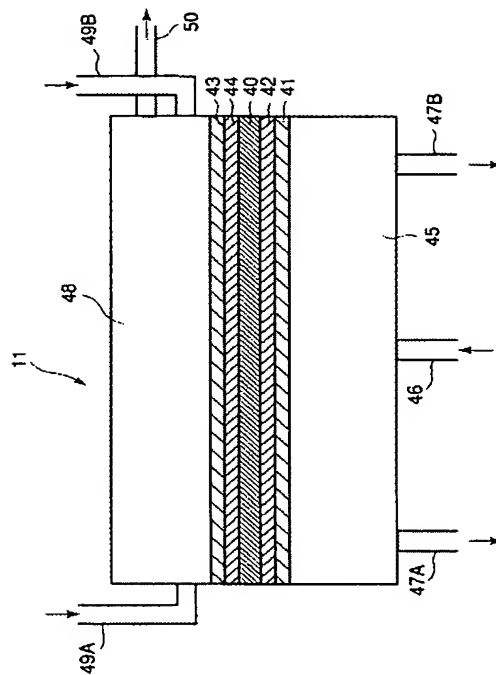
chamber for retaining second liquid fuel, said second liquid fuel being a low-concentration liquid fuel;" and "said fuel cell is removably mountable to said fuel cell body."

HIROHISA et al. pertains to a direct methanol fuel cell system. The Official Action refers to Figure 1 of HIROHISA et al., which is reproduced below.



Paragraph 0008 of HIROHISA et al. (English translation) describes a fuel cartridge 12 in the interior of casing 10. Paragraph 0010 of HIROHISA et al. (English translation) describes a stack cell 11 with cell units 11A and 11B. The Official Action refers to paragraph 0014 (English translation) of HIROHISA et al., but this passage refers to the internal structure of the fuel cell

11 shown in Figure 2 of HIROHISA et al., reproduced below.



HIROHISA et al. thus fails to disclose or infer a removably mountable fuel cartridge that includes a high-concentration fuel tank and a low concentration fuel tank, such as is set forth in claim 1 of the present invention. Indeed, the fuel storage tank 12 of HIROHISA et al. is sealed inside the casing 10 and cannot be "removably mountable."

HIROHISA et al. thus fails to anticipate claim 1 of the present invention. Claims depending upon claim 1 are patentable for at least the above reasons.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Rejections Based On AKIHIRO

Claims 1-4, 6, 7, 14, 15, 17 and 18 have been rejected under 35 U.S.C. 102(e) as being anticipated by AKIHIRO (JP 2004-296135). Claims 10-13 and 16 have been rejected under 35 U.S.C. 103(a) as being unpatentable over AKIHIRO. Claims 5, 19 and 20 have been rejected under 103(a) as being unpatentable over AKIHIRO in view of NOBUHIKO et al. (JP 2003-257466). Claims 8 and 9 have been rejected under 35 U.S.C. 103(a) as being unpatentable over AKIHIRO in view of PRASED et al. (U.S. Pat. Appln. Pub. 2003/0138679 A1) or BULLOCK et al. (U.S. Pat. Appln. Pub. 2003/0207158 A1) or DEVOS et al. (U.S. Pat. Appln. Pub. 2005/0079128 A1). These rejections are respectfully traversed.

AKIHIRO pertains to a fuel tank unit for portable electronic equipment. The Official Action refers to Figure 2 of AKIHIRO, which is reproduced below.

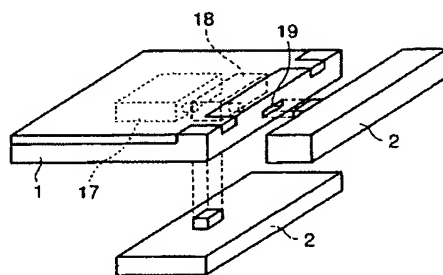


Figure 2 of AKIHIRO shows electronic equipment 1 to which is attached an external fuel tank 2 via connector 19. Inside the electronic equipment 1 is a fuel cell unit 17. Paragraph 0022 (English translation) of AKIHIRO makes clear that Figure 2 shows

different mounting options for the fuel tank 2, and does not depict two fuel tanks. Paragraph 0017 of AKIHIRO describes fuel tank 18, which is "built in."

AKIHIRO thus fails to disclose or infer a removably mountable fuel cartridge that includes a high-concentration fuel tank and a low concentration fuel tank, such as is set forth in claim 1 of the present invention.

The other references applied in the Official Action fail to address the above-described deficiencies of AKIHIRO.

AKIHIRO thus fails to anticipate claim 1 of the present invention. Claims depending upon claim 1 are not anticipated by AKIHIRO at least by their dependencies.

AKIHIRO or any combination of the secondary references are insufficient to induce one of ordinary skill to produce a claimed embodiment of the invention, and a *prima facie* case of unpatentability has thus not been made.

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AKIHIRO thus fails to anticipate claim 1 of the present invention. Claims depending upon claim 1 are not anticipated by AKIHIRO at least by their dependencies.

AKIHIRO or any combination of the secondary references are insufficient to induce one of ordinary skill to produce a claimed embodiment of the invention, and a *prima facie* case of unpatentability has thus not been made.

These rejections are believed to be overcome, and withdrawal thereof is respectfully requested.

#### **CONCLUSION**

The Examiner is thanked for considering the Information Disclosure Statement filed May 5, 2006, and for making an initialed PTO-1449 Form of record in the application. The Examiner is respectfully requested to consider the Information

Disclosure Statement filed November 1, 2007, and to make an initialed PTO-1449 Form of record in the application.

Prior art of record but not utilized is believed to be non-pertinent to the instant claims.

It is believed that the rejections have been overcome, obviated or rendered moot and that no issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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